

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A powder deposition device having an increased toning width, the powder deposition device comprising:

a frame support defining a receiver transport path;

a first toning station comprising a first toning roller and a first rotating magnetic core for forming a magnetic brush, wherein the first toning roller is positioned with a long axis of the respective toning roller substantially perpendicular to the receiver transport path and offset a distance, for applying the magnetic brush for printing on a first area of a print medium receiver in said receiver transport path; and

a second toning station comprising a ~~first~~ second toning roller and a ~~first~~ second rotating magnetic core, wherein the ~~first~~ second toning roller is positioned with a long axis of the ~~respective~~ second toning roller substantially perpendicular to the receiver transport path and offset a distance relative to the first toning roller, for applying the magnetic brush for printing on a second area of a print medium receiver in said receiver transport path;

wherein the first toning station partially overlaps ~~in a direction perpendicular to the receiver transport path with the second station~~ the second toning station in a direction perpendicular to the receiver transport path, thereby allowing both toning stations to print on both an extended area and a same area of the print medium receiver while the respective magnetic brushes are in contact with ~~[[a]]~~ the print medium receiver.

2. (Previously Presented) The device of claim 1, wherein a portion of one or both toning stations is configured wherein relative amounts of toner are deposited by some or all of the toning stations with respect to each other as regulated.

3. (Cancelled)

4. (Cancelled)

5. (Previously Presented) The device of claim 1, wherein the first and second toning stations overlap with each other, and wherein the first and second toning stations are generally aligned with each other so as to form a first set of toning stations, the device further comprising:

a third toning station for printing on the print medium receiver in the receiver transport path;

a fourth toning station for printing on the print medium receiver in the receiver transport path, wherein the third and fourth toning stations overlap with each other, and where the third and fourth toning stations are generally aligned with each other to form a second set of toning stations.

6. Cancelled

7. (Previously Presented) The device of claim 1, wherein the third and fourth toning stations are angled with respect to the receiver transport path for the device.

8. (Previously Presented) The device of claim 1, further comprising:

a third toning station for printing on the print medium receiver in the receiver transport path;

a fourth toning station for printing on the print medium receiver in the receiver transport path:

wherein the first and second toning stations print on a first side of the print medium receiver in the receiver transport path, and wherein the third and fourth toning stations print on a second side of the print medium receiver in the receiver transport path.

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Previously Presented) The powder deposit device of claim 1, wherein the first and second toning stations overlap approximately one to two inches.

13 -22. (Cancelled)

23. (Currently Amended) A printing system for printing wide process widths, the system comprising:

a frame support defining a receiver transport path;

a first set of overlapping toning stations wherein the toning stations of said first set of overlapping toning stations respectively include a rotating magnetic core for forming a magnetic brush and a toning roller for applying the magnetic brush to a print medium receiver in said receiver transport path, wherein the first set of overlapping toning stations is positioned[[,]] substantially perpendicular to the receiver transport path and individual ones of said first set of overlapping toning stations are offset distancee; and

a second set of overlapping toning stations wherein the toning stations of the second set of overlapping toning stations respectively include a rotating magnetic core for forming a magnetic brush and a toning roller for applying the magnetic brush to a print medium receiver in said receiver transport path, wherein the second set of overlapping toning stations is positioned[[,]] substantially perpendicular to the receiver transport path and individual ones of said first set of overlapping toning stations are offset at least a distancee, wherein the first and second sets of toning stations deposit toner on both an extended width area and a same area of a ~~receiver~~ print medium receiver while the respective magnetic brushes are in contact with a print medium receiver in said receiver transport path.

24. (Previously Presented) The system of claim 23, further comprising:

a first subsystem for measuring a respective amount of toner deposited by each toning station in the first set of overlapping toning stations, and for altering the respective amounts of toner deposited by each toning station in the first set of overlapping toning stations; and

a second subsystem for measuring a respective amount of toner deposited by each toning station in the second set of overlapping toning stations, and for altering the respective amounts of toner deposited by each toning station in the second set of overlapping toning stations.

25. (Previously Presented) The system of claim 24, wherein the first subsystem includes a densitometer or an electrometer or a powder layer thickness measuring device for measuring the respective amount of toner deposited by at least one of the toning stations in the first set of toning stations, and wherein the second subsystem includes a densitometer or an electrometer or a powder layer thickness measuring device for measuring the respective amount of toner deposited by at least one of the toning stations in the second set of toning stations.

26. (Previously Presented) The system of claim 24, wherein each toning station in the first and second sets of toning stations includes a densitometer, an electrometer or a powder layer thickness measuring device for measuring the respective amount of toner deposited by the toning station.

27. (Previously Presented) The system of claim 23, further comprising:

a first subsystem for measuring a respective amount of toner deposited by each toning station in the first set of overlapping toning stations, and for approximately equalizing the respective amounts of toner deposited by each toning station in the first set of overlapping toning stations; and

a second subsystem for measuring a respective amount of toner deposited by each toning station in the second set of overlapping toning stations, and for approximately equalizing the respective amounts of toner deposited by each toning station in the second set of overlapping toning stations.

28. (Currently Amended) The system of claim 23, further comprising:

a first subsystem for measuring a respective amount of toner deposited by each toning station in the first set of overlapping toning stations, and for adjusting biases of the toning stations in the first set of overlapping toning stations so as to approximately equalize the respective amounts of toner deposited by each toning stations in the first set of overlapping toning stations; and

a second subsystem for measuring a respective amount of toner deposited by each toning station in the second set of overlapping toning stations, and for adjusting biases of the toning ~~station s~~ stations in the second set of overlapping toning stations so as to approximately equalize the respective amounts of toner deposited by each toning station in the second set of overlapping toning stations.

29. (Previously Presented) The system of claim 23, further comprising:

a measuring subsystem for measuring an amount of toner deposited by the first set of overlapping toning stations relative to an amount of toner deposited by the second set of overlapping toning stations; and

a regulation subsystem for adjusting the amount of toner deposited by the first set of overlapping toning stations relative to the amount of toner deposited by the second set of overlapping toning stations.

30. (Previously Presented) The system of claim 23, wherein the first set of overlapping toning stations deposits a different toning material than the second set of overlapping toning stations.

31. (Withdrawn) A method for process control in a printer having multiple sets of overlapping toning stations, the method comprising:

biasing a first set of overlapping toning stations;

biasing a second set of overlapping toning stations to deposit a smaller amount of toner than the first set of overlapping toning stations;

measuring an amount of toner deposited by each toning station in the first set of overlapping toning stations; and

adjusting a bias of at least one toning station in the first set of overlapping toning stations so as to approximately equalize respective amounts of toner deposited by each toning station in the first set of overlapping toning stations.

32. (Withdrawn) A computer readable medium having stored therein instructions for causing a processor to execute the method of claim 31.

33. (Withdrawn) The method of claim 31, further comprising:
measuring an amount of toner deposited by each toning station in the second set of overlapping toning stations; and
adjusting a bias of at least one toning station in the second set of toning stations so as to approximately equalize respective amounts of toner deposited by each toning station in the first set of overlapping toning stations.

34. (Withdrawn) The method of claim 33, wherein measuring an amount of toner deposited by each toning station in the first set of overlapping toning stations comprises taking respective densitometer or electrometer readings or readings of the thickness of the deposited powder layer for each toning station in the first set of overlapping toning stations, and wherein measuring an amount of toner deposited by each toning station in the second set of overlapping toning stations comprises taking respective densitometer or electrometer readings or readings of the thickness of the deposited powder layer for each toning station in the second set of overlapping toning stations.

35. (Withdrawn) The method of claim 31, wherein biasing the first set of toning stations comprises biasing the first set of toning stations to a first bias voltage with respect to a substrate bias, and wherein biasing the second set of toning stations comprises biasing the second set of toning stations to a second bias voltage lower in magnitude than two times the first bias voltage, with respect to the substrate bias.

36. (Withdrawn) The method of claim 31, wherein measuring an amount of toner deposited by each toning station in the first set of overlapping

toning stations comprises taking respective densitometer or electrometer readings or readings of the thickness of the deposited powder layer for each toning station in the first set of overlapping toning stations.

37. (Withdrawn) The method of claim 31, further comprising:
measuring an amount of toner deposited by the first set of
overlapping toning stations relative to an amount of toner deposited by the second
set of overlapping toning stations; and

adjusting the amount of toner deposited by the first set of
overlapping toning stations relative to the amount of toner deposited by the
second set of overlapping toning stations.

38. (Withdrawn) A method for dynamic process control in a
powder deposition device having multiple sets of toning applicators, the method
comprising:

biasing a first set of toning applicators;

biasing a second set of toning applicators to deposit a smaller
amount of toner than the first set of toning applicators;

measuring an amount of toner deposited by the first set of toning
applicators relative to an amount of toner deposited by the second set of toning
applicators; and

adjusting the amount of toner deposited by the first set of toning
applicators relative to the amount of toner deposited by the second set of toning
applicators.

39. (Withdrawn) A computer readable medium having stored
therein instructions for causing a processor to execute the method of claim 38.

40. (Withdrawn) The method of claim 38, wherein adjusting
the amount of toner deposited by the first set of toning applicators relative to the
amount of toner deposited by the second set of toning applicators comprises
adjusting the amount of toner deposited by the first set of toning applicators.

41. (Withdrawn) The method of claim 38, wherein adjusting the amount of toner deposited by the first set of toning applicators relative to the amount of toner deposited by the second set of toning applicators comprises adjusting the amount of toner deposited by the second set of toning applicators.

42. (Withdrawn) The method of claim 38, wherein adjusting the amount of toner deposited by the first set of toning applicators relative to the amount of toner deposited by the second set of toning applicators comprises adjusting the amount of toner deposited by both the first and second sets of toning applicators.

43. (Withdrawn) A method for process control in a printer having multiple sets of toning applicators providing an increased process width, the method comprising:

 biasing a first set of toning applicators;

 biasing a second set of toning applicators to deposit a smaller amount of toner than the first set of toning applicators;

 measuring an amount of toner deposited by each toning applicator in the first set of toning applicators; and

 adjusting a bias of at least one toning applicator in the first set of toning applicators so as to approximately equalize respective amounts of toner deposited by each toning applicator in the first set of toning applicators.

44. (Withdrawn) The method of claim 43, further comprising:
 measuring an amount of toner deposited by each toning applicator in the second set of toning applicators; and

 adjusting a bias of at least one toning applicator in the second set of toning applicators so as to approximately equalize respective amounts of toner deposited by each toning applicator in the second set of toning applicators.

45. (Cancelled)

46. (Cancelled)

47. (Cancelled)

48. (Cancelled)

49. (Cancelled)

50. (Currently Amended) The printer of claim ~~[[1]]~~1, wherein a portion of one or both toning stations is configured wherein relative amounts of toner ~~[[is]]~~ are deposited by some or all of the toning stations with respect to each other as regulated.